SWALLOW.

A NEW

ALMANACK

for the Year of our

LORD GOD.

1681.

Being the first after Bissextile or Leap-year, and from the Worlds Creation, 5684.

Calculated properly for the famous University and Town of *Cambridge*, where the Pole Artick is elevated 52 deg. 17 min. above the Horizon.

And may serve indifferently for any other place of this Kingdom.

Omnia fatce metis tempus.

CAMBRIDGE,
Printed by *John Hayes*, Printer to the University, 1681.

The vulgar Notes and Moveable Feasts for this Year 1681. in both Accounts, *viz.*

Julian or *English.*			*Gregorian* or Foreign.	
	10	The Golden Number		10
	10	The Cycle of the Sun		10
	20	The Epact		10
	♋	The Dominical Letter		ℂ
Feb.	13	Shrove-sunday	Febr.	16
April	3	Easter-day	April	6
May	12	Ascension-day	May	15
May	22	Whitsunday	May	25
May	29	Trinity-sunday	June	1
Novem.	27	Advent-sunday	Novem.	30

The Anatomy of Mans body.

♈	*Aries* Head and Face	♎	*Libra* Reins and Loyns
♉	*Taurus* Neck & Throat	♏	*Scorpio* Secret members
♊	*Gemini* Arms and Shoul.	♐	*Sagitarius* the Thighs
♋	*Cancer* Breast & Stom.	♑	*Capricornus* the Knees
♌	*Leo* Heart and Back	♒	*Aquarius* the Legs
♍	*Virgo* Bowels and Belly	♓	*Pisces* the Feet.

The

The Terms with their Returns.

Hillary Term begins January 24, and ends February 12, and hath 4 returns, *viz.*

- Octab. Hilar. Jan. 20
- Quind. Hilar. Jan. 27
- Craſt. Purif. Febr. 3
- Octab. Purif. Febr. 10

Eaſter Term begins April 20 ends May 16 and hath 5 returns, *viz.*

- Quind. Paſch. April 18
- Tres Paſch. April 26
- Menſ. Paſch. May 2
- Quind. Paſch. May 9
- Craſt. Aſcen. May 13

Trinity Term begins June 3 and ends June 22, and hath 4 returns, *viz.*

- Craſt. Trin. May 30
- Octab. Trin. June 6
- Quind. Trin. June 13
- Tres Trin. June 20

Michaelmas Term begins October 24 ends November 28 and hath 6 returns, *viz.*

- Tres Mich. Octob. 20
- Menſ. Mich. Octob. 27
- Craſt. anim. Nov. 3
- Craſt. Mart. Nov. 12
- Octab. Mart. Nov. 18
- Quind. Mart. Nov. 25

Note that the Exchequer openeth 8 days before any Term begins, except the Term of Trinity, in which it openeth but 4 days before.

Note alſo that the ſplendid Planet *Venus*, will this year be our bright Evening Star, from the beginning of the year unto the 18 of *June*, and then becoming Oriental, She will be our Morning Star to the end of the year.

January hath xxxi days.

Laſt quarter 1 day, 34 min. paſt 3 afternoon
New moon 9 day, 53 min. paſt 7 at night
Firſt quarter 17 day, 29 min. paſt 4 in the morning
Full moon 23 day, 7 min. paſt 10 at night
Laſt quart 31 day, 20 min. paſt noon.

1	a	Circumciſion	Libra	20	22	5		
2	b	2 Sun. af. Chr.	Scorp.	2	23	6	Sharp air at	
3	c	Octab. John		14	24	8	the beginning	
4	d	Octab. Innoc.		26	25	9	with froſt,	
5	e	Edward	Sagit.	8	26	10	but holds not	
6	f	Epiphany		19	27	11	long.	
7	g	Ced. biſ. *Lond.*	Capr.	1	28	12		
8	a	william		14	29	14		
9	b	1 aft. Epiph.		26	0 ♒	15		
10	c	Paul Hermit	Aquar.	8	1	16	Wholeſom	
11	d	Higinius		21	2	17	winds and a	
12	e	Arcadius	Piſc.	4	3	18	clear air, but	
13	f	Hillary Bith.		17	4	19	not very cold	
14	g	Felicia	Aries	1	5	20	for the ſeaſon.	
15	a	Mauritius		14	6	21		
16	b	2 aft. Epiph.		28	7	22		
17	c	Anthony	Taur.	12	8	23		
18	d	Piſca		26	9	24		
19	e	Wolſtan	Gem.	10	10	25		
20	f	Octab. Hilar.		25	11	26	About this	
21	g	Agnes Virg.	Canc.	9	12	27	time expect	
22	a	Vincent		24	13	28	ſome ſnow	
23	b	3 aft. Epiph.	Leo	8	14	29	and winds.	
24	c	Term begins		22	15	30		
25	d	Conv. S. Paul	Virgo	6	16	30		
26	e	Polycarpus		20	17	31	Much ſnow	
27	f	Quind. Hilar.	Libra	3	18	32	or rain, but	
28	g	Carolus mag.		15	19	33	not very cold.	
29	a	Gildas Ab.		28	20	33		
30	b	K. Char. Mar.	Scorp	10	21	34		
31	c	Adaman		22	22	35		

New moon 8 day, 2 min. after noon
First quarter the 15 day, 23 min. past noon
Full moon the 22 day, 17 min. past 11 beforenoon

M.D.	W.D.	Festival days with Terms	Moons place.	☉ plac. d.	m.	Inclination of the air.
1	d	Ignatius	Sagit. 4	23	35	
2	e	Purification	15	24	36	The month
3	f	Craft. Purif.	27	25	37	begins tempe-
4	g	Gilbertus	Capr. 9	26	37	rate with
5	a	Agatha	22	27	38	snow.
6	b	Sexagesima	Aquar. 4	28	38	
7	c	Rumwald	17	29	39	Cold increa-
8	d	Sun in Pisces	Pisces 0	0	♓ 39	ses.
9	e	Appollonia	14	1	40	
10	f	Octab. Purif.	27	2	40	
11	g	Euphrosina	Aries 11	3	40	
12	a	Term ends	25	4	41	Cold rain or
13	b	Shrove Sund.	Taur. 9	5	41	snow may
14	c	Valentine	24	6	41	now be ex-
15	d	Shrove tuesd.	Gem. 7	7	42	pected.
16	e	Ash wednesd.	21	8	42	
17	f	Finan	Canc. 5	9	42	
18	g	Simeon	19	10	42	
19	a	Acca	Leo 3	11	42	
20	b	1 Sun. in Lent	17	12	42	Windy with
21	c	Timbret	Virgo 1	13	42	snow, but in-
22	d	Cathedr. Petri	15	14	42	different
23	e	Ember week	28	15	42	warm toward
24	f	S. Matthias	Libra 11	16	42	the end.
25	g	Johannes	23	17	42	
26	a	Alexander	Scorp. 6	18	42	
27	b	2 Sun. in lent	18	19	42	
28	c	Oswald	Sagit. 0	20	42	

March hath xxxi days.

Laſt quart. 2 day, 47 min. paſt 9 in the morning
New moon 10 day, 44 min. paſt 12 in the morning
Firſt quarter 16 day, 46 min. paſt 6 at night
Full moon 24 day, 25 min. paſt 1 in the morning.

1	d	David	Sagit.	12	21	41		
2	e	Chad		23	22	41	*March* is uſhered in with high winds with rain accompanying.	
3	f	Lucius	Capr.	5	23	41		
4	g	Kenelac. Ab.		17	24	40		
5	a	Roligite	Aquar.	0	25	40		
6	b	3 ſund. in lent		12	26	40		
7	c	Aquinas		25	27	39		
8	d	Perpetua	Piſces	8	28	39		
9	e	Francisca		22	29	38		
10	f	Sun in Aries	Aries	6	☌	38		
11	g	Oſwin		20	1	37		
12	a	Gregory	Taur.	5	2	36		
13	b	Midlent Sun.		19	3	36	Temperate but boiſterous and windy.	
14	c	Teonulph	Gem.	4	4	35		
15	d	Ariſtobulus		18	5	34		
16	e	Alredd Ab.	Canc.	2	6	33		
17	f	Patrick		16	7	33		
18	g	Edward K.	Leo	0	8	32		
19	a	Joſeph		13	9	31		
20	b	5 Sun. in Len.		27	10	30		
21	c	Benedict	Virgo	10	11	29		
22	d	Appodius		23	12	28		
23	e	Egbert	Libra	6	13	27		
24	f	Lanfranck		19	14	26	Cold and cloudy with rain at the end of the month.	
25	g	Lady day	Scorp.	2	15	25		
26	a	William Not.		14	16	24		
27	b	Palm Sunday		26	17	23		
28	c	Fremund	Sagit.	8	18	22		
29	d	Baldred		20	19	21		
30	e	Patrone	Capr.	1	20	19		
31	f	Adelme		13	21	18		

Laſt quarter 1 day, 16 min. paſt 6 in the morning
New moon 8 day, 4 min. paſt 11 before noon
Firſt quarter 15 day, 25 min. paſt 1 in the morning
Full moon 22 day, 30 min. paſt 4 in the morning
Laſt quarter 30 day, 35 min. paſt 7 at night.

1	g	Good friday	Capr.	25	22	16	
2	a	Francis faſt	Aquar.	8	23	15	Temperate
3	b	Eaſter day		20	24	13	weather at
4	c	Guire	Piſc.	3	25	12	the begin-
5	d	Vincent		16	26	10	ning, with
6	e	Ethelwold	Aries	0	27	9	gentle ſhow-
7	f	Sigene Ab.		14	28	7	ers but vari-
8	g	Egeſippus		20	29	6	able.
9	a	Sun in Taurus	Taur.	14	0 ♉	4	
10	b	Low Sunday		29	1	2	
11	c	Leo Pope	Gem.	14	2	1	
12	d	Hugh		28	2	59	
13	e	Juſtine	Canc.	13	3	57	Windy wea-
14	f	Tiburtius		27	4	55	ther & ſome-
15	g	Oſwald	Leo	10	5	53	thing dry.
16	a	Tranſ. Alban		24	6	52	
17	b	2 aſt. Eaſter	Virgo	7	7	50	
18	c	Quind. Paſc.		20	8	48	
19	d	Elphege	Libra	3	9	46	
20	e	Term begins		15	10	44	
21	f	Anſelm		28	11	42	
22	g	Soter	Scorp.	10	12	40	
23	a	S. George		22	13	38	Moiſt and tur-
24	b	3 Sun. aft. Eaſt.	Sagit.	4	14	36	bulent wea-
25	c	S. Mar. Evan.		16	15	34	ther towards
26	d	Tres Paſch.		28	16	31	the end.
27	e	Walburg	Capr.	10	17	29	
28	f	Vitalis		22	18	27	
29	g	Peter Mart.	Aquar.	4	19	25	
30	a	Erkenwald		16	20	23	

May hath xxxi days.

New moon 7 day, 12 min. past 7 at night
First quarter 14 day, 11 before noon
Full moon 22 day, 59 min. past 7 in the morning
Last quarter 30 day, 42 min. past 8 in the morning.

1	B	Phil. & Jac.	Aquar.	28	21	20		
2	c	Mens. Pasch.	Pisc.	11	22	18	Windy and	
3	d	*Invent. Crucis*		25	23	16	wet at the	
4	e	Monica	Aries	8	24	13	beginning.	
5	f	Algive		23	25	11		
6	g	Joh. Port. Lat	Taur.	7	26	8		
7	a	Stanislaus		22	27	6		
8	B	Rogation Sun.	Gem.	7	28	3		
9	c	Quinq. Pasch.		23	29	1	A serene and	
10	d	Epimachus	Canc.	7	29	58	temperate air	
11	e	Sun in Gem.		22	0 ♌	56	now with	
12	f	Holy Thursd.	Leo	7	1	53	winds.	
13	g	Crast. Ascen.		20	2	51		
14	a	Bonifface	Virg.	4	3	48		
15	B	Sun. aft. Asc.		17	4	46		
16	c	Term ends	Libra	0	5	43		
17	d	Botolph		13	6	40		
18	e	Oswald Bis.		25	7	38	Windy shower-	
19	f	Pudentiana	Scorp.	7	8	35	ery weather	
20	g	Ethelbert		19	9	32	and hot to-	
21	a	Godrick	Sagit.	1	10	30	wards the end.	
22	B	Whitsunday		13	11	27		
23	c	William Roch.		25	12	24		
24	d	Joan Widow	Capr.	7	13	21		
25	e	Ember week		18	14	19		
26	f	Austin B. C.	Aquar.	1	15	16		
27	g	Beda Priest		13	16	13		
28	a	Jonas Ab.		25	17	10		
29	B	Trinity Sund.	Pisces	7	18	7	K. Cha. 2 Nat.	
30	c	Crast. Trin.		20	19	5		
31	d	Petronella	Aries	3	20	2		

June hath xxx days.

New moon 6 day, 8 min. past 1 in the morning
First quarter 12 day, 54 min. past 8 at night
Full moon 20 day, 46 min. past 10 at night
Last quarter 28 day, 25 min. past 6 at night.

1	f	Amphilus	Aries	17	20	59		
2	g	*Corpus Christi*	Taur.	1	21	56	Windy turbulent weather at the beginning with thunder.	
3	a	Term begins		16	22	53		
4	b	Petroch	Gem.	1	23	50		
5	c	1 Jun. af. Trin.		16	24	47		
6	d	Octab. Trin.	Canc.	1	25	45		
7	e	Paulus		16	26	42		
8	f	William Bish	Leo	1	27	39		
9	g	Felicianus		16	28	36		
10	a	Margaret	Virg.	0	29	33		
11	b	S. Barnabas		13	0	30		
12	c	2 Sun. af. Trin.		27	1	27	Hot weather with thunder, and storms of hail.	
13	d	Quind. Trin.	Libra	9	2	24		
14	e	Basil magnus		22	3	21		
15	f	Modestus	Scorp.	4	4	18		
16	g	Richard		16	5	15		
17	a	Botolph		28	6	12		
18	b	Marcus	Sagit.	10	7	9		
19	c	3 Sun. af. Trin.		22	8	6		
20	d	Tres. Trin.	Capric.	3	9	3		
21	e	Walburg		16	10	1	Pretty temperate, but windy with showers of rain toward the end.	
22	f	Term ends		28	10	58		
23	g	Paulinus	Aquar.	9	11	55		
24	a	S. John Bapt.		22	12	52		
25	b	Amphibalus	Pisces	4	13	49		
26	c	4 Sun. af. Trin.		17	14	46		
27	d	Kerinus	Aries	0	15	43		
28	e	Leo II. Pope		13	16	40		
29	f	S. Pet. & Paul		26	17	37		
30	g	Com. S. Paul	Taur.	10	18	34		

New moon 5 day, 42 min. paſt 9 before noon
Firſt quarter 12 day, 41 min. paſt 10 before noon
Full moon 20 day, 19 min. paſt 1 afternoon
Laſt quarter 28 day, 26 min. paſt 2 in the morning.

1	G	Romwald B.	Taur.	25	19	31		
2	a	Viſit. Mary	Gem.	9	20	28	Boiſterous and	
3	B	5 Sun. af. Trin.		24	21	25	turbulent wea-	
4	c	Viricus	Canc.	9	22	23	ther with	
5	d	Ancelmus		24	23	20	thunder, and	
6	e	Seyburga	Leo	9	24	17	ſtorms of hail.	
7	f	Tr. Thom. C.		24	25	14		
8	G	Gzambold A.	Virg.	8	26	11	Not very hot.	
9	a	Edilburg		22	27	9		
10	B	6 Sun. af. Trin.	Libra	5	28	6		
11	c	Pius P. & M.		18	29	3		
12	d	Sun in Leo	Scorp.	1	0	0	Wet but tem-	
13	e	Anacletus		13	0	57	perate for the	
14	f	Bonavent.		25	1	55	ſeaſon.	
15	G	Swithin B.	Sagit.	7	2	52		
16	a	Oſmond		19	3	49		
17	B	7 Sun. af. Trin.	Capr.	0	4	46		
18	c	Roſina		12	5	44		
19	d	Dog days beg		24	6	41		
20	e	Margaret	Aquar.	6	7	38		
21	f	Daniel		19	8	36		
22	G	Mary Mag.	Piſces	1	9	33	Windy wea-	
23	a	Apollinaris		14	10	30	ther with rain.	
24	B	8 Sun. af. Trin.		27	11	28		
25	c	S. James Apo.	Aries	10	12	25	Temperately	
26	d	Anna		23	13	23	hot and varia-	
27	e	Joſeph *Arim.*	Taur.	7	14	20	ble.	
28	f	Celſus		20	15	18		
29	G	Martha	Gem.	4	16	15	Unconſtant	
30	a	Abdon		19	17	13	weather.	
31	B	9 aſt. Trin.	Canc.	3	18	10		

New moon 3 day, 58 min. past 4 afternoon
First quarter 11 day, 4 min. past 12 in the morning
Full moon 19 day, 49 min. past 2 in the morning
Last quarter 26 day, 8 min. past 8 in the morning.

1	C	Lammas day	Canc.	18	19	8	
2	D	Stephanus	Leo	3	20	6	Moist soultry
3	E	Invent. Steph.		18	21	3	weather, but
4	F	Dominick	Virg.	2	22	1	the heat soon
5	G	Martin		16	22	59	abates.
6	A	Eugenius	Libra	0	23	56	
7	B	10 after Trin.		13	24	54	
8	C	Cyriacus		26	25	52	
9	D	Julian	Scorp.	9	26	50	
10	E	Lawrence		21	27	47	A more serene
11	F	Gilbert B C.	Sagit.	3	28	45	air now and
12	G	Clare Virg.		15	29	43	temperate.
13	A	Sun in Virgo		27	0	41	
14	B	11 after Trin.	Capr.	9	1	39	
15	C	Nicodemus		21	2	37	
16	D	Edith	Aquar.	3	3	35	Very hot a-
17	E	Lambert		15	4	32	bout this time
18	F	Hilary		27	5	31	with thunder.
19	G	Clintack	Pisces	10	6	29	
20	A	Bernard		23	7	27	
21	B	12 after Trin.	Aries	7	8	25	
22	C	Timothy		20	9	23	
23	D	Zacheus fast	Taur.	3	10	22	Windy dry
24	E	S. Bartholom.		17	11	20	weather to-
25	F	Lewis King	Gem.	1	12	18	ward the end.
26	G	Zopherine		15	13	16	
27	A	Rufus		29	14	15	
28	B	Dog days end	Canc.	13	15	13	
29	C	Decol. J. Bapt.		28	16	12	
30	D	Cecla Virg.	Leo	12	17	10	
31	E	Adrian		26	18	8	

September hath xxx days.

New moon 2 day, 44 min. paſt 2 in the morning
Firſt quarter 9 day, 8 min. paſt 8 at night
Full moon 17 day, 6 min. paſt 4 afternoon
Laſt quarter 24 day, 4 min. paſt 1 afternoon.

1	f	Giles Abbot	Virgo	11	19	7	
2	g	Adaman		24	20		Haſty ſhowers
3	a	Euphemus	Libra	8	21	4	and indiffe-
4	b	14 after Trin.		21	22	3	rently hot
5	c	Victorinus	Scorp.	4	23	1	weather.
6	d	Magnus		17	24	0	
7	e	Dunſtan		29	24	59	
8	f	Nat. of Mary	Sagit.	11	25	57	
9	g	Gorgonius		23	26	56	
10	a	Nicholas	Capr.	5	27	55	High winds
11	b	15 after Trin.		17	28	54	and boiſterous
12	c	Eanſwide		28	29	53	weather about
13	d	Sun in Libra	Aquar.	11	0	52	this time.
14	e	*Exalt. Crucis*		23	1	51	
15	f	Nicomeden	Piſces	6	2	50	
16	g	Euphemia		19	3	49	
17	a	Lambert	Aries	2	4	48	
18	b	16 after Trin		16	5	47	
19	c	Januarius	Taur.	0	6	46	
20	d	Fauſta		14	7	45	
21	e	Ember Week		28	8	44	S. Matthew
22	f	Maurice	Gem.	12	9	44	
23	g	Elias		26	10	43	Stormy wea-
24	a	Winibald	Canc.	10	11	42	ther & ſome-
25	b	17 after Trin.		24	12	42	thing cold.
26	c	Cyprian	Leo	8	13	41	
27	d	Coſ. & Dam.		22	14	41	
28	e	Lioba	Virgo	6	15	40	
29	f	S. Mich Arch.		20	16	40	
30	g	Jerome P.	Libra	3	17	39	

October hath xxxi days.

New moon 1 day, 10 min. past 3 afternoon
First quarter 9 day, 21 min. past 3 afternoon
Full moon 17 day, 5 min. past 2 in the morning
Last quarter 23 day, 2 min. past 8 at night
New moon 31 day, 44 min. past 6 in the morning.

1	a	Remigius	Libra	16	18	39	
2	b	18 after Trin.	Scorp.	☌	19	38	Windy & wet
3	c	Gerrard Ab.		12	20	38	weather may
4	d	Francis		25	21	38	begin the
5	e	Placidus	Sagit.	7	22	37	month.
6	f	Bruno		19	23	37	
7	g	Mark	Capr.	1	24	37	
8	a	Demetrius		13	25	37	
9	b	19 after Trin.		25	26	37	
10	c	Paulin B. Y.	Aquar.	6	27	36	Turbulent &
11	d	Burchard		19	28	36	boisterous &
12	e	Wilfred	Pisces	1	29	36	like to snow.
13	f	Sun in Scorp.		14	☌	36	
14	g	Calixtus		27	1	36	
15	a	Tereſa	Aries	10	2	36	
16	b	20 after Trin.		24	3	37	
17	c	Florence	Taur.	8	4	37	
18	d	S. Luke Evan.		23	5	37	
19	e	Ptolomy	Gem.	7	6	37	Cold rainy
20	f	Treſ. Mich.		22	7	37	weather may
21	g	Ursula	Canc.	7	8	38	now be ex-
22	a	Cordula		21	9	38	pected with
23	b	21 after Trin.	Leo	5	10	38	little altera-
24	c	Term begins		19	11	39	tion to the
25	d	Criſpine	Virgo	3	12	39	end of the
26	e	Evariſtus		16	13	39	month.
27	f	Menſ. mich. fa.		29	14	40	
28	g	Sim. & Jude	Libra	13	15	40	
29	a	Marciſſus		25	16	41	
30	b	22 after Trin.	Scorp.	8	17	41	
31	c	Quintine		21	18	42	

November hath xxx days.

First quarter 8 day, 39 min. past 10 in the morning
Full moon 15 day, 9 min. past 4 afternoon
Last quarter 22 day, 51 min. past 5 in the morning
New moon 30 day, 57 min. past 12 in the morning.

1	D	All Saints	Sagit.	3	19	43	
2	E	All souls		15	20	43	Variable un-
3	F	Craft. Anim.		27	21	44	constant wea-
4	G	Winifride	Capr.	9	22	44	ther, but
5	A	Powder plot		21	23	45	grows cold
6	B	23 after Trin.	Aquar.	3	24	46	and like to
7	C	Willebrode		15	25	47	freez.
8	D	Claudius		27	26	47	
9	E	Theodore	Pisces	9	27	48	
10	F	Erastus		22	28	49	
11	G	Martine	Aries	5	29	50	
12	A	Craft. Mart.	Sun in ♐.		0	51	
13	B	24 after Trin.	Taur.	2	1	52	
14	C	Lawrence		17	2	53	
15	D	Leopold	Gem.	1	3	54	
16	E	Edmond		16	4	55	
17	F	Hugh	Canc.	1	5	56	Cold rain or
18	G	Octab. Mart.		16	6	57	snow.
19	A	Pontian	Leo	1	7	58	
20	B	25 after Trin.		15	8	59	
21	C	Present Mary	Virgo	0	10	0	
22	D	Cicily Virg.		13	11	1	
23	E	Clement		26	12	2	
24	F	Chrysogonus	Libra	10	13	3	Tempestuous
25	G	Quind. Mart.		22	14	4	about the end
26	A	Peter	Scorp.	5	15	5	but not very
27	B	Advent Sund.		17	16	6	cold.
28	C	Term ends	Sagit.	0	17	7	
29	D	Saturnus		11	18	9	
30	E	S. Andrew		24	19	10	

December hath xxxi days.

First quarter 8 day, 37 min. past 4 in the morning
Full moon 15 day, 53 min. past 1 in the morning
Last quarter 21 day, 9 min. past 8 at night
New moon 29 day, 27 min. past 8 at night.

1	f	Daniel	Capr.	6	20	11		
2	g	Libane		18	21	12	Temperately	
3	a	Lucius King		29	22	13	cold for the	
4	b	2 sun. in Adv.	Aquar.	11	23	15	season.	
5	c	Sabbas		23	24	16		
6	d	Nicholaus	Pisces	5	25	17		
7	e	Ambrose		18	26	18		
8	f	Conce. of M.	Aries	0	27	20		
9	g	Leocadia		13	28	21		
10	a	Melchiades		27	29	22		
11	b	3 sun. in Ad.	Taur.	10	0	23	Sun in Capri.	
12	c	Elfrede		25	1	25	Indifferently	
13	d	Lucia	Gem.	9	2	26	good weather	
14	e	Ember week		25	3	27	at this time.	
15	f	Hilda Abbess	Canc.	10	4	29		
16	g	O Sapientia		25	5	30		
17	a	Ananias	Leo	10	6	31		
18	b	4 sun. in Ad.		25	7	33		
19	c	Nemethius	Virgo	10	8	34	Cold cloudy	
20	d	Julianus sa.		23	9	35	weather with	
21	e	S. Thomas	Libra	6	10	36	snow.	
22	f	Theodosius		19	11	38		
23	g	Victoria	Scorp.	2	12	39		
24	a	Ante Ev. sa.		14	13	40		
25	b	Christ's birth		27	14	42	Windy and	
26	c	S. Stephen	Sagit.	9	15	43	turbulent	
27	d	S. John		21	16	44	with some	
28	e	Innocents	Capr.	3	17	45	frost to end	
29	f	Tho. Becket		14	18	47	the Year.	
30	g	Eustachius		26	19	48		
31	a	Silvester.	Aquar.	8	20	49		

A Regal Table in a more exact manner.

The Year, Moneth, and Day, (accounting the Year to begin *Jan.* 1.) whereon every K. and Q. of *Eng.* since the Conq. began their reign.			The number of Years, Moneths, & Days, that every K. & Q. reign. 28 da. to a mon.				The num. of y. expired in this y. since they began to reign: as also since they ended.	
K. W. Conq.	1066	Octob. 14	20 y	11 m	22 d	615		
W. Rufus	1087	Sept. 9	12 y	11 m	18 d	594	W Conq.	
Henry 1	1100	August 1	35 y	4 m	11 d	581	W. Rufus	
Stephen	1134	Decem. 2	18 y	11 m	18 d	546	Henry	1
Henry 2	1154	Octob. 25	34 y	9 m	2 d	527	Stephen	
Richard 1	1189	July 6	9 y	9 m	0 d	492	Henry	2
John	1199	April 6	17 y	7 m	0 d	482	Richard	1
Henry 3	1216	Octob. 19	56 y	1 m	0 d	465	John	
Edward 1	1272	Nov. 16	34 y	8 m	6 d	409	Henry	3
Edward 2	1307	July 7	19 y	7 m	5 d	374	Edward	1
Edward 3	1327	Jan. 25	50 y	5 m	7 d	355	Edward	2
Richard 2	1377	June 21	22 y	3 m	14 d	304	Edward	3
Henry 4	1399	Sept. 29	13 y	6 m	3 d	282	Richard	2
Henry 5	1413	Marc. 20	9 y	5 m	24 d	268	Henry	4
Henry 6	1422	Aug. 31	38 y	6 m	16 d	259	Henry	5
Edward 4	1461	March 4	22 y	1 m	8 d	221	Henry	6
Edward 5	1483	April 9	0 y	2 m	18 d	198	Edward	4
Richard 3	1483	June 22	2 y	2 m	5 d	198	Edward	5
Henry 7	1485	Aug. 22	23 y	10 m	24 d	196	Richard	3
Henry 8	1509	April 22	37 y	10 m	2 d	172	Henry	7
Edward 6	1547	Jan. 28	6 y	5 m	19 d	135	Henry	8
Q. Mary	1553	July 6	5 y	4 m	22 d	128	Edward	6
Q. Elizab.	1558	Nov. 17	44 y	4 m	15 d	123	Q. Mary	
K. James	1603	Mar. 24	22 y	0 m	3 d	79	Q. Elizab.	
Charles 1	1625	Mar. 27	22 y	10 m	3 d	56	K. James	
Charles 2	1649	Jan. 30	Long live the King.			32	K. Charles	1

The use of this Table in Example.

King *Henry* 8 began his Reign in the year of *Christ* 1509, *April* 22 He Reigned 37 years, 10 moneths, and 2 days. It is since he began his Reign 172 years compleat the 22 of *April* this year 1681. Now to know the time since the end of his Reign, before his name standing on the right hand, you shall there find 135 years since he died, *January* 28. And so of the rest.

SWALLOW.

SWALLOW.

The latter part of this

ALMANACK

for the Year of our

LORD GOD

1681.

Being the 1st after Biſſextile or Leap-year, and from the Conqueſt of *England* by *William* Duke of *Normandy* 615 years.

Wherein are contained an account of the Eclipſes, the times of the Sun's entering into the four Cardinal Signs, many neceſſary notions, together with pleaſant and uſefull Tables for the Weights and Meaſures of ſeveral Commodities, and an exact Table of Board and Timber meaſure, with other things very profitable, and delightfull.

Poma dat Autumnus: formoſa eſt meſſibus Æſtas:
Ver præbet flores: Igne levatur Hyems.

CAMBRIDGE,
Printed by *John Hayes*, Printer to the Univerſity, 1681.

Of the Eclipſes this year.

THis Year there will be four Eclipſes, two of the Sun, and as many of the Moon; but there will be but one viſible to us in theſe *Britiſh* Iſles, and that will be the latter Eclipſe of the Moon.

The firſt Eclipſe in order will be of the Moon, *February* the 22 day at 11 beforenoon, it falls in 15 degrees of *Virgo*, and may be viſible to our *Antipodes*.

The ſecond will be of the Sun, *March* the 10 day, at one in the morning, and therefore not viſible to us, it happens in the beginning of *Aries*, and will ſhew it ſelf to our *Antipodes*.

The third Eclipſe will be of the Moon, *Auguſt* the 19 day, at 3 in the morning, it falls in 6 degrees of *Piſces*, and will be viſible to us, if clouds hinder not.

The fourth and laſt Eclipſe will be of the Sun, *September* the 2 day, at 3 in the morning, and therefore not to be ſeen by us, it happens in 20 degrees of *Virgo*, and will be but a ſmall Eclipſe, where moſt viſible.

Of the Suns Entrance into the four Cardinal Signs *this year.*

HE enters *Aries March* 9, 38 min. paſt 8 at night, and then begins our Spring quarter.

He enters *Cancer*, *June* the 10, 48 min. paſt 9 at night, and then begins our Summer quarter.

He enters *Libra*, *September* the 12, 51 min. paſt 2 afternoon, at which time begins our Autumn quarter.

He enters *Capricorn*, *December* the 11, 57 min. paſt 2 in the morning, and then begins our Winter quarter.

Thus

THus having given an account of the Eclipſes and the times the Sun enters into the Cardinal Signs. I ſhall now give you ſome general directions, uſefull notions, together with pleaſant and eaſie Tables, for the weights and meaſures of moſt commodities now traded with in *England*.

All meaſures of application or length are denominated from the parts of the body, as the Palm, the Foot, and the like, but are indeed in *England* taken from the Yard Standard kept in *Guild Hall* in *London*, of which the third part is a foot, and the 36 an inch. Set down in the firſt Table from an inch to a mile.

Now although the Table is ſo eaſie that I preſume there are but few but will underſtand it at firſt ſight, yet for the benefit of thoſe that do not; I ſhall as briefly as I can explain it.

This Table conſiſts of ſeveral columns: and may be conſidered, either as to the columns or ſpaces between line and line from top to bottom, or by the ſpaces contein'd between line and line ſide-ways, or from the left hand to the right: now the figures are always of the denomination is ſignified at the top of the column they belong to, & are equal to the reſt of the figures they ſtand with between the ſame lines from right to left: as for example, to begin at the top, 3 inches are equal to a palm, 9 inches equal to 3 palms, equal to 1 ſpan and ſo of the reſt. So in a yard there is contained 2 cubits, 3 foot, 4 ſpan, 12 palms, 36 inches, the other part of the Table contains ſquare meaſures or ſuperficial, and the way of uſing it is the ſame with the former; as for example, 144 ſquare inches are equal to a foot ſquare. 1296 inches are equal to 9 feet, or 1 yard ſquare. Thoſe figures that come after ſuch a mark as this ⸫ the firſt of them ſtand for the 10th part the 2 for the hundred part.

Inch	Palm	Span	Foot	Cubit	Yard	Ell	Paces	Fathom	Pole	Furlong	Mile
3											
9	3										
12	14	1 1/3									
18	6	2	1 1/2								
36	12	4	3	2							
45	15	5	3 3/4	2 1/2	1 1/4						
60	20	6 2/3	5	3 1/3	1 2/3	1 1/4					
72	24	8	6	4	2	1 1/4	1 1/5				
198	66	22	16 1/2	11	5 1/2	4 2/5	3 1/10	2 1/4			
7920	2640	880	660	440	220	176	132	110	40		
63360	21120	7040	5280	3520	1760	1408	1056	880	320	8	

Table of Square Measure.

Acres	Rood	Pole	Pace	Yard	Feet	Inches
4	160	174 29	4840	4356	0	627264
	40	435 6	1210	1089		156816
		10 89	30 1/4	272 1/4		39204
			Pace	2 77	25	36000
				Yard	9	1295
					Feet	144

In the Table of Long measure it is said a Pole or Perch is 16 1/2 feet, which is the Statute perch, besides which there are other perches or poles, as 18 feet for fen and wood-land, 21 for forrests, *Lancashire* and *Irish* measure, and 18 3/4 *Scotch*.

The

The measure for horses is by the handfull equall to 4 inches.

In *England* we make use of 2 sorts of weights *Troy* and *Averdupoize*.

By *Troy* weight Gold, Silver, Jewels, Amber, Electuaries, Bread corn, and Liquors, are weighed, and from this *Troy* pound are taken all measures for wet and dry Commodities.

By *Troy* weights are weighed all *Grocery* ware, and in short all manner of things that can waste: the Tables for *Troy* and *Averdupoize* must be used like the foregoing for measures:

Troy Weight. / *Averdupoize Weight.*					
			Pound.	12	240	5760
			Ounc.	20	480
Scrupels				*pen.W.*	24
3	*Drams*				*Grains*
24	8	*Ounces*			
384	128	16	*Pound*		
43008	14336	1792	112	*Hund.*	
860160	286720	35840	2240	20	*Tun*

Although the pound *Troy*, be bigger then the pound *Averdupoize*, yet the ounce *Troy* is lesser then the ounce *Averd.* the proportion of a *Troy* pound to *Averd.* pound being as 17 to 14, but of a *Troy* ounce to an *Averd.* ounce as 51 to 56.

A Tun weight *Averdupoise* is always 20 hund. of all things except Lead which is 19 hund. $\frac{1}{2}$.

Allom, Cinnamon, Nutmegs Pepper and Sugar have 131. $\frac{1}{2}$ to the stone, and 1081. to the hundred. *Essex* Cheese or Butter the Clove is 8 pound, the Wey 32 Cloves, or 256 l. In *Suffolk* the Clove is 8 l. the Wey 42 Cloves or 336 l.

Hay should have 20 hund. but is sould for 18 C. 36 trusses or 2016 l. Wooll is sould by the Clove, or half stone 7 l. or by the stone 14 l. Tod 28 l. wey 182 l. Sack 364 l. Last 4368 l. Iron and Shot are weighed 14 l. to the stone, 28 l. to the quarter, 112 l. to the hundred, 20 C. to the Tun.

A Faggot of Steel is 120 l. a burden of Gad Steel is 9 score or 180 l. for the weight of Butter and Sope 56 l. of Butter, and 60 l. of Sope make a Firkin, and 4 firkins a Barrel of either.

Dry Measures of capacity are raised from the Gallon conteining 8 pints, which should be contain'd in 272 ½ Cubick inches, and should hold of pure running water 9 l. 13 oun. 12 dra. ½ of *Averd.* weight.

Pints								
8	*Gal.*							
16	2	*Pec.*						
64	8	4	*Bush.*					
128	16	8	2	*Strik*				
256	32	16	4	2	*Coomb*			
512	64	32	8	4	2	*Seam or quarter*		
3072	384	102	48	24	12	6	*Wey*	
5120	640	320	80	40	20	10	12	*Last*
A	1 l.	8 l.	16	64	128	256	512	3072	5120
B	14 ou.	7 l.	14	56	1 c.	2 c.	4 c.	24 c.	40 c.

This Table is exactly of the same nature with the former, onely at the bottom are added 2 spaces mark'd with A and B, in the line A is expressed the respective Measures weight of wheat in *Troy* weight, in the line B in *Averd.* for example a peck of wheat weighs 16 *Troy*, 14 *Averd.* and so for the rest.

Meal is weighed as Corn, but the common repute is that a gallon of Wheaten Meal, weighs 7 l. *Averd.* and 8 l.

8 l. 6 oun. 4 pen. weight *Troy*, and ſo a Buſhel 56 l. *Averd.* and 68 l. 1 oun. 12 pen. weight *Troy*. All other Grain, likewiſe Salt, Lime, Coales, &c. follow this Meaſure which is called *Wincheſter* Meaſure. But when Sea Coale and Salt are meaſured with this Buſhel, they are heaped, or elſe there is allowed five ſtriked Pecks to the Buſhel, and this is called Water meaſure, 36 ſuch Buſhells make a Chaldron of Coales; and on Ship-board they allow 21 Chaldron to the ſcore.

Liquid Meaſure is either for Wine, or Ale and Beer meaſure; the Gallon for Wine meaſure contains 231 Cubical inches and ſhould hold of running water, 8 l. 1 oun. 11 dra. *Averd.* and 9 l. 10 oun. 1 pen. $\frac{1}{4}$ weight *Troy*.

A Table of Wine meaſure, A Tun of Wine weighing Averd. 17 c. *weight one Pint* 1 l. *and half an ounce* Troy.

Pints							
8	*Gall.*						
144	18	*Runalet*					
252	31 $\frac{1}{2}$	1 $\frac{1}{4}$	*Barrel*				
336	42	2 $\frac{1}{3}$	1 $\frac{1}{3}$	*Terce*			
504	63	3 $\frac{1}{2}$	2	1 $\frac{1}{2}$	*Hogshead*		
672	84	4 $\frac{2}{5}$	2 $\frac{2}{3}$	2	1 $\frac{1}{3}$	*Puntion*	
1008	126	7	4	3	2	1 $\frac{1}{2}$	*Butt*
2016	252	14	8	6	4	3	2 *Tun*

In a Gallon for Ale or Beer there is 282 ſolid inches, and it holds of pure water 10 l. 3 oun. 142 dra. *Averdupoiſe.*

Hog.	2	4	8	64	512
	Bar.	2	4	32	256
		Kild.	2	16	128
			Firk.	8	64
Pints			Ale Meaſure.	Gall.	8
18	Gall.		Beer Meaſure.		Pint
72	9	Firk.			
144	18	2	Kild.		
288	36	4	2	Bar.	
576	72	8	4	2	Hog.

Veſſels for Butter, Fiſh, and Sope follow the Ale meaſure of a gallon, 8 Gallons make a Firkin, 2 Firkins a Kilderkin, 2 Kilderkins an Ale Barrel, and 12 Ale Barrels a Laſt.

A Table of Board and Timber measure with the squares from 4 to 30 exactly calculated.

Board measure.	Inches Quarters	Squares.	Timber measure.	Board measure.	Inches Quarters	Squares.	Timber measure.
36 0 0	4	16	108 0 0	16 0 1	9	81	21 3 3
33 8 8	1	18	96 0 0	15 5 7	1	85	20 3 3
32 0 0	2	20	86 4 0	15 1 6	2	90	19 2 0
30 3 1	3	22	78 5 4	14 7 7	3	95	18 1 9
28 8 8	5	25	69 1 2	14 4 0	10	100	17 2 8
27 4 4	1	27	64 0 0	14 0 2	1	105	16 4 6
26 1 3	2	30	57 6 0	13 7 1	2	110	15 7 1
25 0 0	3	33	52 3 6	13 3 9	3	115	15 0 3
24 0 0	6	36	48 0 0	13 0 9	11	121	14 2 8
23 0 4	1	39	44 3 0	12 8 0	1	126	13 7 1
22 1 5	2	42	41 1 4	12 5 2	2	132	13 0 9
21 3 3	3	45	38 4 0	12 2 9	3	138	12 5 2
20 5 7	7	49	35 2 6	12 0 0	12	144	12 0 0
19 18 6	1	52	33 2 3	11 7 5	1	150	11 5 2
19 2 0	2	56	30 8 6	11 5 2	2	156	11 0 8
18 5 8	3	60	28 8 0	11 2 9	3	162	10 6 7
18 0 0	8	64	27 0 0	11 0 7	13	169	10 2 2
17 4 5	1	68	25 4 1	10 8 7	1	175	9 8 7
16 9 4	2	72	24 0 0	10 6 7	2	182	9 4 9
16 4 6	3	76	22 7 4	10 4 7	3	189	9 1 4

Board measure.	Inches Quarters	Squares.	Timber measur.	Board measur.	Inches Quarters.	Squares.	Timber measur.
10 2 8	14	169	8 8 1	6 8 6	21	441	3 9 2
10 1 0	1	203	8 5 1	6 7 7	1	451	3 8 3
9 9 3	2	210	8 2 3	6 6 9	2	462	3 7 4
9 7 6	3	217	7 9 6	6 6 2	3	473	3 6 5
9 6 4	15	225	7 6 8	6 5 4	22	484	3 5 7
9 4 0	1	232	7 4 4	6 4 7	1	495	3 4 9
9 2 9	2	240	7 2 0	6 4 0	2	506	3 4 1
9 1 4	3	248	6 9 7	6 3 3	3	517	3 3 4
9 0 0	16	256	6 7 5	6 2 6	23	529	3 2 7
8 8 6	1	264	6 5 4	6 1 9	1	540	3 2 0
8 7 3	2	272	6 3 5	6 1 2	2	552	3 1 3
8 6 0	3	280	6 1 6	6 0 6	3	564	3 0 6
8 4 7	17	289	5 9 8	6 0 0	24	576	3 0 0
8 3 5	1	297	5 8 1	5 9 4	1	588	2 9 4
8 2 3	2	305	5 6 4	5 8 8	2	600	3 8 8
8 1 1	3	315	5 4 8	5 8 2	3	612	2 8 2
8 0 0	18	324	5 3 3	5 7 6	25	625	2 7 6
7 8 9	1	333	5 1 9	5 7 0	1	637	2 7 1
7 7 8	2	342	5 0 5	5 6 5	2	650	2 6 5
7 6 8	3	351	4 9 2	5 5 9	3	662	2 6 1
7 5 8	19	361	4 7 9	5 5 4	26	676	2 5 5
7 4 8	1	370	4 6 7	5 4 8	1	689	2 5 1
7 3 9	2	380	4 5 5	5 4 3	2	702	2 4 8
7 2 9	3	390	4 4 3	5 3 8	3	715	2 4 2
7 2 6	20	400	4 3 2	5 3 3	27	729	2 3 7
7 1 1	1	410	4 2 1	5 2 8	1	749	2 3 2
7 0 2	2	420	4 1 1	5 2 3	2	756	2 2 8
6 9 4	3	431	4 0 1	5 1 9	3	767	2 2 5

Board measur.	Inches Quarters	Squares.	Timber measur.	Board measur.	Inches Quarters	Squares.	Timber measur.
5 1 4	28	784	2 2 0	4 3 [illegible]3		1089	1 5 9
5 0 9	1	798	2 1 6	4 3 3	1	1104	1 5 6
5 0 5	2	812	2 1 2	4 3 0	2	1122	1 5 4
5 0 0	3	826	2 0 9	4 2 7	3	1139	1 5 2
4 9 6	29	841	2 0 5	4 2 3	34	1156	1 4 9
4 9 2	1	855	2 0 2	4 2 0	1	1173	1 4 7
4 8 8	2	870	1 9 8	4 1 8	2	1190	1 4 5
4 8 4	3	885	1 9 5	4 1 4	3	1208	1 4 3
4 8 0	30	900	1 9 2	4 1 1	35	1225	1 4 1
4 7 6	1	915	1 8 9	4 0 8	1	1242	1 3 9
4 7 2	2	930	1 8 6	4 0 5	2	1260	1 3 7
4 6 8	3	945	1 8 3	4 0 3	3	1278	1 3 5
4 6 4	31	961	1 7 9	4 0 0	36	1296	1 3 3

The Explanation and uſe of the Table.

THe Table conſiſts of two principle Columns, and theſe two are again divided each Column into four, ſo that it conſiſts of eight Columns.

The firſt of which entituled Board meaſure, ſhews how many Inches in length are required to the making of a Foot of Board according to the breadth given.

The ſecond, entituled, Inches and Quarters, contains the

the breadth in Inches and Quarters, beginning at 4 Inches and proceeding thus, 4. 1, 2, 3. which are 4 Inches ¼ ½ & ¾ of an Inch, and so likewise of the rest.

The third entitu[illegible]squares, shews the *area* or content of a Square whose side are the Inches and parts of Inches standing equal with the said Square Inches.

The fourth, entituled Timber measure shews how many Inches and parts of Inches make a Foot of Timber according to the side of the Square given, or the content of its base. The other four Columns are of the same nature with the former explained, and therefore I shall proceed to the use of the Table.

The use of the Table Exemplified.

First suppose I have a Board 13 Inches and ¼ broad, and I desire to know how much in length thereof will make a Foot: first, I seek in the Column entituled, Inches and Quarters for 13 and ¼ and against the same under the title of Board measure, I find 10 Inches, 6 primes, and 7 seconds will make a Foot at that breadth, the like may be practised for any other breadth of Board or Glass, or Cieleing, or Pavement: and if you desire to know how many Bricks will floor a Room, first find the area or content of the floor in square Inches, and then find the content of one Brick, divide thereby, and the quotient will shew you how many Bricks will suffice for the flooring of the Room, you may also by the help of the Column of Squares readily find a square equal to the base of any Parallelepipedon or piece of Timber, which is thicker than it is broad, *exemp. gr.* Suppose a piece of Timber to be 8 Inches thick and 12 Inches broad, if I multiply these sides one by another, the product will be

be 96 the content of the baſe of the Parallelepipedon which ſeeking in the Column of Squares I find not, but I find 95 the neareſt to it ſtanding againſt 9 Inches and $\frac{3}{4}$ therefore I ſay, 9 Inches and $\frac{3}{4}$ *ferè* will make the ſide of a ſquare board whoſe area will be equal to the Parallelogram, or baſe of the Parallelepipedon aforeſaid, now looking into the Column of Timber meaſure right againſt this 9 Inches and $\frac{3}{4}$ I find 18 Inches, 1 prime, 9 ſeconds, which is the length of a Foot of that piece of Timber according to the aforeſaid thickneſs or content of its baſe. You may likewiſe ſee by this Table how to reduce a parallelogram into a ſquare, or to perform many ſuch like things of good uſe, and with much delight, and as profitable.

Some ſhort fundamental Rules of meaſuring Superficies and Solids, and how to meaſure Round Timber.

FIrſt for a Parallelogram or a figure that is Longer than it is broad, multiply both the ſides one by the other, and you ſhall have the content, as ſuppoſe the length be 20 and the breadth 9, theſe multiplied produce 180, the content ſought.

The area of a Triangle is produced by multiplying half the baſe into the height, or the baſe into half the height, becauſe every Triangle is equal to half the Parallelogram of the ſame height and length, and under the ſame parallels, as ſuppoſe a Triangle whoſe baſe is 20 the length of the former Parallelogram, and the height 9 the breadth thereof, now 10 into 9 makes 90 the area of the Triangle.

Thus you may do with any irregular figure by dividing it into Triangles, and then finding their contents add them together, and you ſhall have the content of the whole.

To

To measure Circles.

THe area of a Circle is produced by multiplying half the Circumference into the Semidiameter, as suppose the half Circumference is 9 and the Semidiameter 3 these multiplied produce 27 the area or content sought. For every Circle as *Archimedes* demonstrates, is equal to the Triangle, whose Base is equal to the Circumference, and height equal to the Semidiameter of the Circle.

The Proportion of a Circle to the Square of the Diameter is as 11 to 14 *ferè* therefore by the Rule of three, say as 11 to 14; so the area of the Circle suppose 27 to the Square about the Circle, then multiply 27 by 14 and divide by 11 and the Quotient shews you your desire.

The Diameter of a Circle given to find the Circumference.

THe Proportion will be as 7 to 22 so the Diameter which suppose 28, to 88, the Circumference, which is effected by multiplying 28 by 22 and dividing by 7, according to the Rule of three.

In like manner having the Circumference you may find the Diameter onely by converting the terms, saying as 22 to 7, so 88 the Circumference to 28 the Diameter, so that the Circumference of a Circle is trible of the Diameter and about $\frac{1}{7}$ of it.

To make a Square equal to a Circle, extract but the Square root of the content, and you will have the side of a Square equal to the Circle; or by the foregoing Table look for a Square number equal to it, or that which comes nearest to it, under the title of Squares and right against it

it under the title of Inches and Quarters you will find the ſide.

The Square within the Circle is equal to half the Square without, therefore take half the content of the Square without, and extract the Square root or find the ſide of it in the foregoing Table by looking among the Squares, you will find the ſide anſwering to it under the title of Inches and Quarters, as for example, ſuppoſe the content of the Square without be 800 Inches or Feet, half of this is 400, then looking 400 under the title of Squares you will find 20 ſtanding againſt it which is the ſide of that Square which is to be inſcribed within the Circle. And note that if you enter the Table with Feet you will be anſwered with Feet and parts of a Foot, if with Yards, Yards and parts of a Yard, &c. and note likewiſe that what hath been ſaid of Boards may be applyed to any the like Superficies as Land, Wainſcoat, &c.

For the meaſuring of round Timber or Stone, &c. you muſt know that round Timber repreſents Cylinders, now the Solidity of a Cylinder is found by multiplying the content of the Baſe which is a Circle by the height, and the product gives the content or Solidity, as if the Baſe be 27 the height 6 theſe multiplied produce 162. The Solidity of a Cylinder or round piece of Timber, in like manner are Priſmes meaſured.

Cones and Pyramids are the third part of Cylinders, and Priſmes, repreſenting taper Timber, their Solidity is found by multiplying the content of their Baſes by the third part of their height by finding the content of the Baſe of the Cylinder or round piece of Timber, you may by the former Table find how many Inches in length of that piece will make a Foot Solid, as ſuppoſe the area of the baſe be 27, look 27 under the title of Squares, and right againſt it in the row of Timber meaſure ſtands 64 the length of a Foot Solid.

A plain and easie Table shewing the true Interest due upon any sum of money from five shillings to an hundred pounds, for a year or under, after the rate of six pounds in the hundred.

		1 Mon.			3 Mon			6 Mon.			9 Mon.			A year.		
		sh	*p.*	*q*	*sh*	*p*	*q.*	*sh.*	*p*	*q.*	*sh*	*p*	*q*	*sh.*	*p.*	*q.*
Shill.	5	0	0	1	0	0	3	0	1	3	0	1	2	0	3	2
	10	0	0	2	0	1	3	0	3	2	0	5	0	0	7	0
	15	0	0	3	0	2	2	0	5	1	0	8	2	0	10	2
Pounds	1	0	1	0	0	3	2	0	7	0	0	10	2	1	2	1
	2	0	2	1	0	7	0	1	2	1	1	9	1	2	4	2
	3	0	3	2	0	10	2	1	9	1	2	7	3	3	6	3
	4	0	6	3	1	2	1	3	4	2	3	6	3	4	9	0
	5	0	4	0	1	6	0	3	0	0	4	6	0	6	0	0
	6	0	7	0	1	9	2	3	7	0	5	4	2	7	2	1
	7	0	8	1	2	1	0	4	2	1	6	3	1	8	4	2
	8	0	9	2	2	4	2	4	9	1	7	3	1	9	6	3
	9	0	10	3	2	8	1	5	4	2	8	0	3	10	9	0
		po	*sh.*	*p*	*po*	*sh.*	*p.*	*po*	*sh*	*p.*	*po.*	*sh.*	*p.*	*po*	*sh.*	*p.*
Tens of pounds.	10	0	1	0	0	3	0	0	6	0	0	9	0	0	12	0
	20	0	2	0	0	6	0	0	12	0	0	18	0	1	4	0
	30	0	3	0	0	9	0	0	18	0	1	7	0	1	16	0
	40	0	4	0	0	12	0	1	4	0	1	16	0	2	8	0
	50	0	5	0	0	15	0	1	10	0	2	5	0	3	0	0
	60	0	6	0	0	18	0	1	16	0	2	14	0	3	12	0
	70	0	7	0	1	1	0	2	2	0	3	3	0	4	4	0
	80	0	8	0	1	4	0	2	8	0	3	12	0	4	16	0
	90	0	9	0	1	7	0	2	14	0	4	1	0	5	8	0
	100	0	10	0	1	10	0	3	0	0	4	10	0	6	0	0

Find the principal in the first Column, & in the other you have the interest due for one, three, six, nine, or twelve moneths.

A Table of the hour and minute of Sun-rising every second day.

days	Januar. ho.	mi.	Februa. ho.	mi.	March ho.	mi.	April ho.	mi.	May ho.	m.	June ho.	mi.
2	8	4	7	15	6	16	5	14	4	21	3	46
4	8	1	7	11	6	12	5	10	4	17	3	45
6	7	58	7	7	6	8	5	6	4	14	3	44
8	7	56	7	3	6	4	5	2	4	11	3	43
10	7	53	6	57	6	0	4	58	4	7	3	43
12	7	51	6	53	5	56	4	54	4	5	3	43
14	7	48	6	50	5	52	4	50	4	2	3	43
16	7	45	6	46	5	48	4	46	4	0	3	44
18	7	43	6	42	5	44	4	43	3	58	3	45
20	7	40	6	38	5	40	4	39	3	56	3	46
22	7	37	6	34	5	36	4	35	3	54	3	47
24	7	33	6	30	5	32	4	32	3	52	3	48
26	7	29	6	26	5	29	4	29	3	50	3	49
28	7	25	6	22	5	25	4	25	3	48	3	50
30	7	21	0	0	5	21	4	22	3	47	3	52

days	July ho.	mi.	August ho.	mi.	septem. ho.	mi.	Octob. ho.	mi.	Novem. ho.	m.	Decem. ho.	mi
2	3	54	4	39	5	39	6	41	7	37	8	15
4	3	56	4	43	5	42	6	45	7	40	8	15
6	3	58	4	46	5	46	6	49	7	44	8	16
8	4	0	4	50	5	50	6	52	7	47	8	17
10	4	3	4	54	5	54	6	56	7	51	8	17
12	4	6	4	58	5	58	7	0	7	54	8	17
14	4	8	5	2	6	2	7	4	7	57	8	17
16	4	11	5	6	6	6	7	8	7	59	8	16
18	4	15	5	10	6	11	7	12	8	1	8	15
20	4	18	5	14	6	15	7	15	8	3	8	15
22	4	21	5	18	6	20	7	19	8	5	8	14
24	4	24	5	21	6	24	7	22	8	7	8	12
26	4	27	5	25	6	28	7	25	8	9	8	10
28	4	30	5	29	6	32	7	29	8	11	8	9
30	4	34	5	32	6	36	7	32	8	13	8	7

Seek the day on the side; and right against it, in every moneth, you have the hour and minute of Sun-rising.

Look how many minutes the Sun rises after 3, 4, 5, 6, 7, 8.
So many he sets before 9, 8, 7, 6, 5, 4.

A Table of Annuities and Reversions.

What 1 pound to be paid any number of years hence, under 31, is worth in ready money.				What 1lb Annuity to continue any in under 31 years worth in ready money at 6 *per cent.*				
	sh.	d.	q.		lb.	sh.	d.	q.
1	18	10	2	1	0	18	10	2
2	17	9	2	2	1	16	8	0
3	16	9	2	3	2	13	5	2
4	15	10	0	4	3	9	3	2
5	14	11	1	5	4	4	3	0
6	14	1	1	6	4	18	4	1
7	13	3	2	7	5	11	7	3
8	12	6	2	8	6	4	2	1
9	11	10	0	9	6	16	0	1
10	11	2	0	10	7	7	2	1
11	10	6	2	11	7	17	8	3
12	9	11	1	12	8	7	8	0
13	9	4	2	13	8	17	0	2
14	8	10	0	14	9	5	10	3
15	8	4	0	15	9	14	3	0
16	7	10	2	16	10	2	1	2
17	7	5	0	17	10	9	6	2
18	7	0	0	18	11	16	6	2
19	6	7	1	19	11	3	2	0
20	6	2	3	20	11	9	4	3
21	5	10	2	21	11	15	3	1
22	5	6	2	22	12	0	10	0
23	5	2	3	23	12	6	0	3
24	4	11	1	24	12	11	0	0
25	4	7	2	25	12	15	8	0
26	4	4	3	26	13	0	0	3
27	4	1	3	27	13	4	2	2
28	3	11	0	28	13	8	1	2
29	3	9	1	29	13	11	9	3
30	3	5	3	30	13	15	3	2

The use of these Tables are both after a manner, for finding what one pound will yield, you may by multiplication know what 5lb or 10lb or 100lb will yield.

As for Example.

A Lease or Annuity being worth 30lb *per annum* which is to continue 20 years what may the value thereof be in ready money? You may see by the last Table that one pound Annuity to continue twenty years is worth 11lb 9sh 4d 3q which multiply by 30 and you shall have your desire.

Note that the first Table shews what one pound to be paid any number of years hence is worth in ready money, that is when the interest of the yearly decrease is deducted, or Rebated, as 20sh to be paid 20 years hence is now worth but 6sh 2d 3q.

The second, what one pound yearly continuing is worth, the interest in like manner being deducted.

Note also that the fundamental for Rebate is thus, say as 106lb to 100, so 100lb [illegible]

A

A Table ſhewing how to find Eaſter for ever by the help of the Golden Number and Dominical Letter.

G.N	A	B	C	D	E	F	G
i	Apr. 9	10	11	12	13	7	8
ii	Mar. 26	27	28	29	30	31	Apr. 1
iii	Apr. 16	17	18	19	20	14	15
iv	Apr. 9	3	4	5	6	7	8
v	Mar. 26	27	28	29	23	24	25
vi	Apr. 16	17	11	12	13	14	15
vii	Apr. 2	3	4	5	6	Mar. 31	Apr. 1
viii	Apr 23	24	25	19	20	21	22
ix	Apr 9	10	11	12	13	14	8
x	Apr. 2	3	Mar 28	29	30	31	Apr. 1
xi	Apr 16	17	18	19	20	21	22
xii	Apr 9	10	11	5	6	7	8
xiii	Mar 26	27	28	29	30	31	25
xiv	Apr. 16	17	18	19	13	14	15
xv	Apr 2	3	4	5	6	7	8
xvi	Mar 2[illegible]	27	28	22	23	24	25
xvii	Apr. 16	10	11	12	13	14	15
xviii	Apr. 2	3	4	5	Mar. 30	31	Apr. 1
xix	Apr 23	24	18	19	20	11	22

Yea. of our Lord	1680	1681	1682	1683	1684	1685	1686
G.N.	9	10	11	12	13	14	15
D.Le.	DC	B	A	G	F	E	D

The foregoing Table explained.

BY the former Table you may eaſily find *Eaſter*, (and from thence the other Moveable Feaſts) in any year to come. The uſe is thus, You muſt firſt know the Golden Number and Dominical Letter for that year in the which you would know when *Eaſter* will fall, which you may find for 7 years at the bottom of the Table, then enter the Table with the Golden Number in the firſt Column and the Dominical Letter at the top, and in the common Angle is the day of the moneth whereon *Eaſter* falleth that year.

Example, this year 1681 the Golden Number is 10, the Dominical Letter B. I find 10 in the firſt Column, and I go right forward from 10 till I come under the Letter B, where I find *April* 3, upon which day *Eaſter* falls this year, thus do for any other year, onely in Leap-year, there being two Dominical Letters, work with the laſt of them as before.

Having found *Eaſter*, you may from thence find the other Moveable Feaſts, Shroveſund is 7 weeks before *Eaſter*, Rogation-ſunday 5 weeks after *Eaſter*, The Thurſday after Rogation is Aſcenſion day, 7 weeks after *Eaſter* is Whitſunday, the Sunday following is Trinity-ſunday, the Thurſday after that is *Corpus Chriſti*.

Advent-ſunday, is always the neareſt Sunday to the Feaſt of S. *Andrew*, whether it be before it or after it.

The

The Names of the principal Fairs in *England*, as they have heretofore been ſet forth by others, and are now Corrected and continued for the common good.

January.

THe 5 day at Hicetford in Lancaſhire, the 6 day at Saliſbury, Tueſday after at Melton-Mowbray, the Thurſday after at Banbury: the third Tueſday in January at Potton: the 25 at Graveſend, Briſtol, Churchinford, Northallerton in Yorkſhire every Wedneſday from Chriſtmas till June.

February.

The 1 day at Bromley in Lancaſhire, the 2 at Reading in Barkſhire, at Maidſton, Bickleſworth, Bicklesfield, Bath, Lyn, Bugworth: the 6 day at Stafford for 6 days: the 14 at Oundle, Feverſham: 24 at Henley upon Thames, Baldock: On Aſhwedneſday at Royſton, Dunſtable, Eaton, Tamworth, Tunbridg, Lichfield, Exeter, Ciceter. The firſt Thurſday in Lent at Banbury: the 26 at Stanford an Horſe Fair.

March.

The 3 day at Bromel-brakes in Norfolk, 4 at Bedford, at Oakham: 12 at Alſome in Norfolk, Sudbury, Wooburn, Stanford, at Wye: 13 at Bodwin in Cornwall: 20 at Durham, Alesbury: Munday before our Lady day at Kendal, at Wisbich, 25 at Huntington, Northampton, Malden, Aſhwel in Hartfordſhire, Newcaſtle, Oney, S. Albans: Midlent Saturday at Saffron-walden: Palmſunday-eve at Wisbich, Worceſter, Pomfret, on Goodfriday at Norwich, the Tueſday before Eaſter at Potton.

April.

Eaſter Munday at Oney in Bedfordſhire, Gainsborough. Eaſter Tueſday at Daintry in Northamptonſh. Godmanchester,

chester, Schole in Norfolk, S. Edmunds bury. On Wednesday at Wellingborough in Northamptonsh. Off Friday in the same week at Darby. On Saturday at Bickleſworth: a day at Hitchin, at Rochford, Northfleet: 5 at Wallingford: 7 at Derby, 9 at Billingſworth, Bickleſworth: the 22 at Stabford, 23 at Ipſwich; Harbin in Norfolk, Northampton, Sapſar in Hartfordſhire, Charing, Hinningham, Tamworth, Bury in Lancaſhire. St Pombs in Cornwal, Ampthill, Chicheſter, Engfield, Gilford, Biſhops-Hatfield: the 15 at Buckingham, at Bourn in Lincolnſ. at Colebrook. Dunmow in Eſſex, Darby, Oakham in Rutlandſhire: the 29 at Tenderden in Kent, Cleet. 30 at Beverly a week together.

May.

The 1 day at Swaffam, Haveril in Eſſex, Laytonbuzzard in Huntingtonſh. Rippon in Yorkſ. Reading, Maidſtone, Chelmford, Leiceſter, Litchfield, Lexfield in Suffolk, Stow, Stanſted, Tuxford in the Clay, the 3 day at Elſtow in Bedfordſh, Noneaton in Warwickſ. Thetford in Norfolk, Waltham Abby, Hinningham, Rochdale, Bramyard. the 6 at Almeſbury, at Aſhford, 7 at Newton in Lancaſhire, Beverly, Oxford. Bath: the 8 at Maidſtone: the 19 at Rocheſter, Dunſtable, Magfield in Suffolk. On Rogation Munday at Reach. On Aſcenſion day at Thaxted, Beverly, Rippon, Sudminſter, Biſhopſtratford, S. Neots, Wickham in Lancaſhire, Middle-wich in Cheſhire, Chappel-Frith in Darbiſh. On Whitſun-even at Skipton in Craven. On Whitſun-Munday at S. Ives, Rygate in Surry, Bickleſworth, Bradford, Agmunſham in Buckinghamſh. On Whitſun-Tueſday at Newmarket. On Wedneſday at Royſton. Thurſday at Owndle in Northamptonſ. 26 at Lenham, 29 at Crainbrook.

June.

Trinity-even at Rowel, Kendal. On Corpus Chriſti day at Banbury, Biſhopſtratford, S. Neots, Coventry, Newbury. The 3 at Alesbury: 9 at Maidſtone. 11 at Breme in Norfolk, Bardfield in Eſſex, 17 at Hadſtock, 23 at S. Albans,

bans, Deerham in Norfolk, Shrewsbury, 24 at Halſon in Suffolk, Barnwel by Cambridge, Bedford, Colcheſter, Hartford, Leiceſter, Rumford, Reading, Windſor, Hallifax, York, Beverly, Haſlingden, 26 at Briſtol, Darby, 27 at Burton on Trent, Polſtone 28 at S Pombs in Cornw, 29 at Peterborough, Athwel, Sudbury, Stebbing in Eſſex, Benington in Hartfordſhire.

July.

The firſt Tueſday at Potton. The 1, 2, 3 days at Congleſtone in Cheſhire, 7 at Royſton, Burntwood. The Munday after at Fodringham, at Canterbury: the 11 at Partney, 17 at Stevenage: 20 at Uxbridge, Coolidge, Woodſtock: the 22 at Ickleton, Bickleſworth, Norwich, Colcheſter, Newark upon Trent; 25 at Audley-end by Walden, Reading, Baldock, Darby, Dover, Erith, Ipſwich, Stamford.

Auguſt.

The firſt day at Bedford, S. Neots, Dunſtable, Feverſham, Wisbich, Bickleſworth, Thaxted: the 6 at Peterborough: the 10 at Blackmore, Harply in Norfolk, S. Ives, Bedford, Banbury, Farnham, Brainford, Owndle: the 15 at Cambridge, Huntington, Dunmow, Luton, Northampton: the 24 at London, Sudbury, Norwich, Oxford, Northallerton, Dover, Beggers-buſh, Burton the 28 at Aſhford, Daintry: the 29 at Halſon in Suffolk, Harlow-Buſh in Eſſex, Watford.

September.

The firſt day at S. Giles in the Buſh. On Thurſday and Friday before the 8 day at Sandback in Cheſhire. 7, 8, 9, 10 at Woodbury-hill in Dorſetſhire, 7 at Ware. 8 at Huntington, Bury in Lancaſhire, Partney, Wakefield, Northampton, Sturbridge fair begins: the 11 at Wolfpit in Suff. 14 at Rippon, Waltham-Abby, Cheſterfield in Darbiſhire, Richmond: the 21 at Marlborough, Bedford, Baldock, S Edmundsbury, Holden in Holderneſs, Braintry, Brackly-Maiden, Malden, Mildnal: the 29 at S. Ives, Baſingſtoke, Marketdeeping, Shelford in Bedfordſh. Biſhopſtratford, Malden,

Malden, Stow in Lincolnſh. S. Albans, Canterbury, Leiceſter, Newbury, Weſtcheſter, Weymer for 7 days: Thurſday after at Banbury.

October.

The 2 day at Salisbury, the 6 at Havent in Hampſh. Maidſtone, Coolidge, Gayworth by Lyn. S. Faiths by Norwich, the 8 at Biſhopſtratford, Harborough, 9 Gainsborough, the 13 at Windſor, Colcheſter, Graveſend, Hitchin, Royſton: the Tueſday before S. Luke at Potton: 18 at Ely, Biſhop Hatfield, Barnet, Banbury, Thirſt, Burton on Trent, Wellinborough: the 21 at Saffron Walden, Coventry: the 23 at Bickleſworth, 28 at Newmarket, Hartford, Oxford, Diſs, Wakefield, Stamford, Richdale in Lancaſhire.

November.

The 1 day at Chelmsford, 2 at Epping, Kingſton on Thames, Padamhaſſon in Suffolk, 6 at Newportpond, Bedford, Hartford, 11 at Lodden in Norfolk, Lenton in Nottinghamſhire, Hempton, Fockingham Bridgeſtock, Marlborough: the 17 at Spalding in Lincolnſh. Lincoln, Harlow, Hide, Northampton: the 19 at Horſham in Kent: the 20 at S. Edmundsbury, Ingerſton in Eſſex, Heath, the 23 at Sandwich, the 30 at Baldock, Bareford, Kolingborough, Maidenhead, Warrington, Rocheſter, Wakefield, York.

December.

The firſt day at Tutbury: the 5 at Pluckley: the 9 at S. Neots, at Woodſtock, Exeter, Spalding, Norwich in Cheſhire, Seven-oak in Kent, Arundel, Grantham: the 7 at Sandhurſt, the 8 at Northampton, Clitheral in Lancaſhire, Huntington, Leiceſter, at Malpas in Cheſhire: the 19 at Canterbury, Salisbury.

FINIS.